

EXHIBIT 15

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Li

Docket No: Li-002.6

Appln. No.: 17/558,674

Group Art Unit: 2859

Confirmation No.: 6973

Examiner: Pelton

Filed: December 22, 2021

For: Sheath for Convenient Charging

AMENDMENT AND RESPONSE

In response to the office action, dated as mailed March 10, 2022, please accept this amendment and response.

Please amend the title as follows:

Sheath for Convenient Charging

Please amend the claims as follows:

1. (currently amended) A sheath for convenient charging, comprising:
a sheath having a left side, a right side and a top side, a first closed end, a second open end and a surrounding bottom portion surrounding at least a portion of one of the left side, the right side, the top side, the first closed end and the second open end of the sheath,
wherein the sheath is separate from and attaches to a body [has] having an inner surface, an outer surface and a first port between the inner surface and the outer surface,
wherein at least a portion of the sheath extends above the outer surface of the body,
wherein the sheath receives a female end of a cable connector having surrounding sides, an operative end, a cord end and a cord,
wherein the operative end of the female end of the cable connector is retained in the second open end of the sheath and the cord end of the female end of the cable connector is retained in the first closed end of the sheath to provide the female end of the cable connector in a flat position with the operative end of the female connector being uncovered and above the outer surface of the body,
wherein the cord of the female end goes through the first port between the inner surface and the outer surface and the surrounding bottom portion is attached to a portion of the body adjacent to the first port.

2. (original) A sheath as in claim 1, wherein the body has an opening between the inner surface and the outer surface and the surrounding bottom portion is attached to the inner surface of the body.

3. (original) A sheath as in claim 1, further comprising an external connecting cable having a male end, wherein the male end of the external cable connecting line is plugged into the operative end of the female end of the cable connector.

4. (original) The sheath as in claim 1, wherein the body is selected from the group consisting of luggage, bag, gloves, activewear, jacket, socks, shoes, hats, glasses, goggles and belt.

5. (original) The sheath as in claim 1, further comprising a second outer surface that covers the outer surface of the body.

6. (currently amended) The sheath as in claim 1, wherein the sheath has at least one ventilation opening on at least one of ~~the at least three sides of the sheath~~ the left side, the right side, the top side, the first closed end and the second open end.

7. (currently amended) The sheath as in claim 1, wherein the sheath has at least one ventilation opening ~~[[is]]~~ along the second open end of the sheath.

8. (currently amended) The sheath as in claim 1, further comprising an attachment portion that extends around a bottom portion of the sheath and is in communication with the inner surface of the body.

9. (original) The sheath as in claim 8, wherein the attachment portion is a piece of fabric that covers the opening between the inner surface and the outer surface and has an opening for the cable connector.

10. (original) The sheath as in claim 1, further comprising a piece of fabric in communication with the inner surface of the body and retaining at least the operative end of the female end of the cable connector in the sheath.

11. (original) The sheath as in claim 10, wherein the piece of fabric is selected from the group consisting of a reinforced piece of fabric, elastic material and ribbon.

12. (original) The sheath as in claim 1, further comprising a rigid cover in

communication with the inner surface of the body and retaining at least the operative end of the female end of the cable connector in the sheath.

13. (original) The sheath as in claim 1, further comprising a dust cap attached to the sheath, wherein the dust cap is movable to cover and uncover the operative end of the female connector.

14. (currently amended) The sheath as in claim 1, wherein at least one of a male connector of a extension cable and the female connector of the extension cable is further equipped with a wireless technology standard for exchanging data over short distances as an anti-loss alarm, which is used to connect to the device on the product to be charged.

15. (currently amended) The sheath as in claim 1, wherein at least one of ~~[[the]]~~ a male connector and ~~[[the]]~~ a female connector of the extension cable is further equipped with a GPS device for positioning.

16. (currently amended) The sheath as in claim 1, wherein the first closed end is tapered and the sheath tapers down from the ~~four sides to the first closed end~~ left side, the right side and the top side.

17. (original) The sheath as in claim 1, wherein the sheath has four sides with a bottom side having a bottom side opening to allow the female end of the cable connector to sit in the sheath and the cord of the cable to go through the bottom side opening.

18. (original) The sheath as in claim 1, wherein the outer surface of the body is the inside of a pocket.

19. (original) The sheath as in claim 1, wherein the sheath is attached to the body with the first closed end above the second open end.

20. (original) The sheath as in claim 1, further comprising a piece of material attached to at least one of a portion of the inner surface of the body and a portion of the surrounding bottom portion to retain the operative end of the female end of the cable connector in the sheath.

21. (original) The sheath as in claim 1, wherein the surrounding bottom portion is a flat portion.

22. (currently amended) The sheath as in claim 1, wherein the body is provided with a cable laying channel from a power storage device placing space to the first port ~~for the penetration of the extension cable.~~

23. (currently amended) The sheath as in claim 22, wherein a channel closing or opening accessory provided on the side of the first port on the outer surface of the body.

24. (original) The sheath as in claim 23, wherein the channel closing or opening accessory is selected from the group consisting of a zipper, buckle, button, magic tape, elastic band, ribbon and welding.

25. (currently amended) The sheath as in claim ~~[[1]]~~22, wherein a second port of the cable laying channel is above the ~~electrical~~ power storage device placing space.

26. (original) The sheath as in claim 23, wherein the sheath is on a shoulder strap of a bag body, and the second port is on the joint between the shoulder strap and bag body, wherein the cable laying channel extends from the first port to the joint between the shoulder

strap and the bag body along the shoulder strap, then extends to the electrical storage device placing space away from the joint between the shoulder strap.

27. (currently amended) The sheath as in claim 23, wherein a ~~the~~ position of the lower end of the opening accessory varies from end of shoulder strap to a max height of 10cm distance above from the top end of the female connector.

28. (original) The sheath as in claim 1, wherein the cable connector is a type- C cable.

29. (currently amended) A sheath for convenient charging, comprising:
a sheath having a raised portion ~~that extends above an outer surface of a body,~~
wherein the sheath is a separate piece that attaches to a body and when the sheath is attached to the body the raised portion extends above an outer surface of the body.

wherein the raised portion has an opening, and a surrounding bottom portion surrounding at least a portion of the raised portion,

wherein the body has an inner surface, an outer surface and a body opening between the inner surface and the outer surface;

wherein the sheath is at the body opening with the raised portion above the outer surface and at least a portion of the surrounding bottom portion is in communication with a portion of the body,

wherein the sheath has a female end of a cable connector in the opening, wherein the female end of the cable connector has surrounding-sides, an operative end and a cord end and the operative end of the female end of the cable connector is retained in the opening to provide the female end of the cable connector in a flat position with the operative end of the female connector being uncovered and above the outer surface of the body.

30. (original) A sheath as in claim 29, wherein the raised portion is selected from the group consisting of dome shaped, raised circular shape, raised semi-circular shape, raised rectangular shape, raised square shape and raised polygon shape.

RESPONSE

Replacement sheet containing Figures 3, 4, 5, 6, 7, 8, 9, 10 and 11 is submitted herewith. No new matter is added as these figures were in application 17151756 which is incorporated by reference.

The prior art does not teach or suggest “a surrounding bottom portion surrounding at least a portion of one of the left side, the right side, the top side, the first closed end and the second open end of the sheath” as in claim 1 or “wherein the raised portion has an opening, and a surrounding bottom portion surrounding at least a portion of the raised portion” as in claim 29.

For ease of reference, this is the surrounding bottom portion. This allows for attachment to the body and secure insertion and removal of the cable connector.

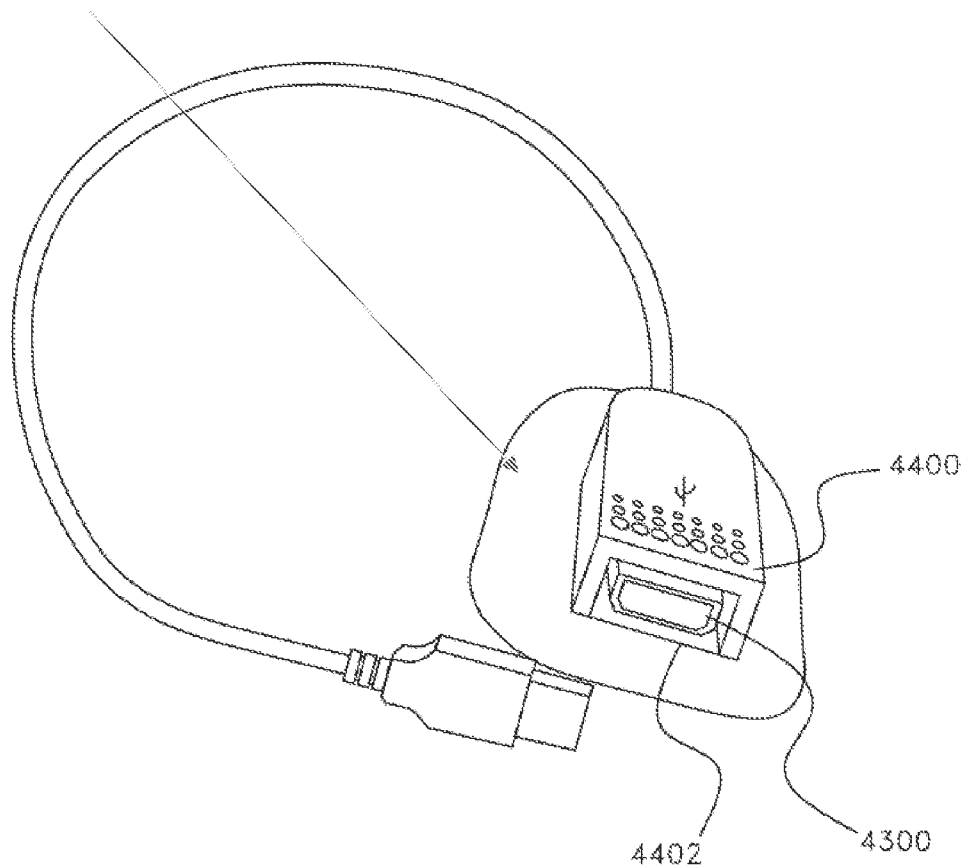
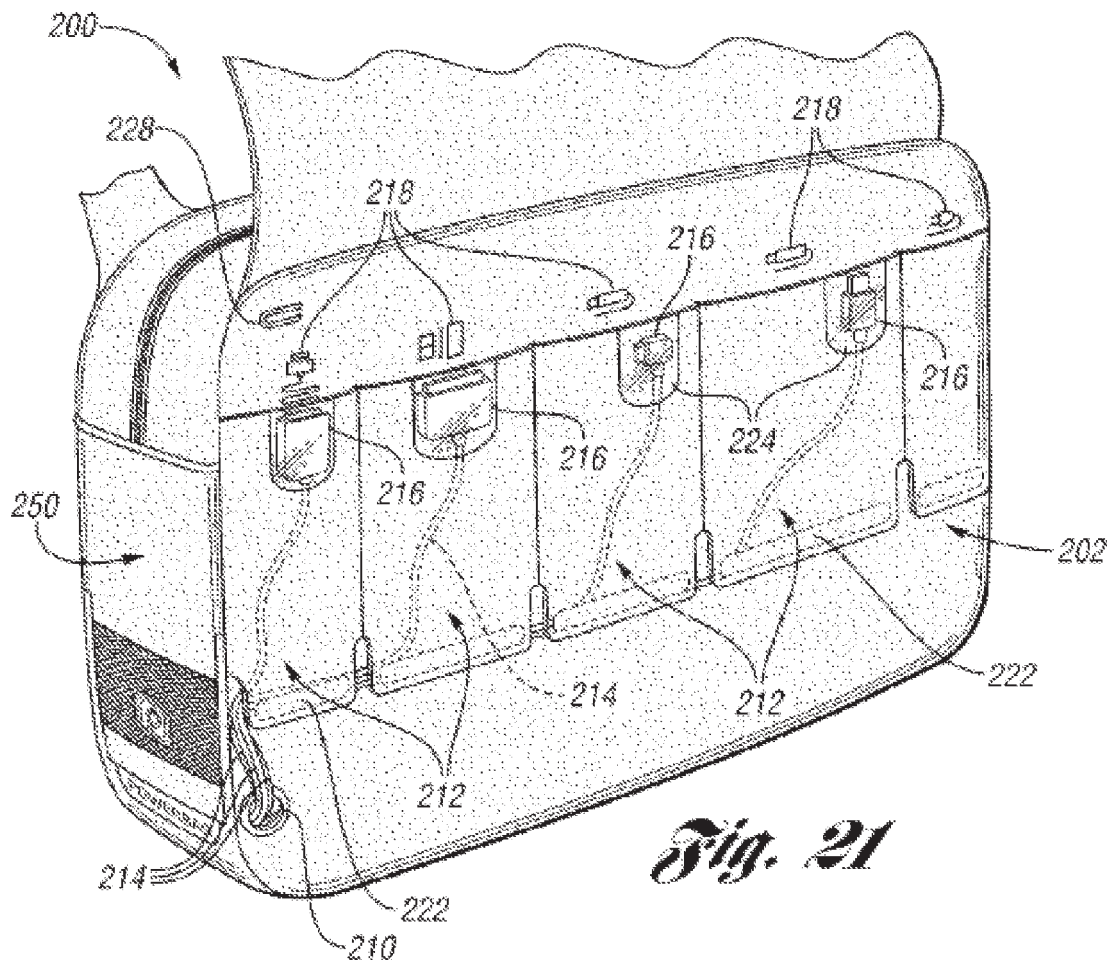


Fig. 44

Ferber Reference



The prior art also fails to teach or suggest that the sheath extends above the outer surface of the body. Claim 1 positively recites, “wherein at least a portion of the sheath extends above the outer surface of the body.” Claim 29 similarly positively recites, “a sheath having a raised portion that extends above an outer surface of a body.”

Ferber is directed to a connector retained when not being used and pulled out of the pocket to be used. Ferber expressly provides, “The compartments 212 may each have a connector pocket 224 sized to receive the connectors 216 when not connected to an electronic device, allowing the

connectors 216 to be easily located by a user within the compartment 212.” Ferber [0066]. Ferber additionally provides, “The connector 40 fits inside the pocket 42 and may be placed there when it is not connected to a mobile device. The pocket 42 allows the connector 40 to be stored and easily located by the user within the compartment 36.” Ferber [0040]. Because of this, there must be some length of cord that may be pulled in and out.

This is one of the very problems addressed by the current invention. One of the intentions of the invention is to allow for easy charging of a device without the need to open a bag or luggage. See also [003] The present invention intends to overcome the disadvantages stated above, and provides a type of bag or luggage for convenient charging, which enables the user to charge a device or product needing to be charged conveniently at any time or any place during traveling, without necessarily opening the bag or luggage, nor taking out the power source for charging.

The claims have been amended to recite that the sheath is separate from and attaches to the body. Support for this amendment may be found in, at least, Figures 12 and 13 (showing the sheath being attached to the body) and [0089] “when attached to a body.” The pocket of Ferber is a part of the bag (body as in the claimed invention).

It is also noted that the Ferber teaches that connector is pulled in an out of the pocket for use and does not teach “the female end of the cable connector is retained in the first closed end of the sheath to provide the female end of the cable connector in a flat position with the operative end of the female connector being uncovered.” Put another way, the connectors shown in Ferber are not retained in a flat position as they are the actual connections that connect to the phone/ device. The female end of the cable connector, as claimed, does not plug into a device.

103 Rejections

The examiner cites to the Fanelli reference (US 2015/0014337) for the teaching of at least one ventilation opening on at least one of the left side, the right side, the top side, the first closed end and the second open end.

Fanelli is directed to a dumpster cover. See Fanelli [009] “The object of the present invention is to provide a cover for concealing structures and objects such as portable toilets, storage containers, trash receptacles, and dumpsters to allow for the camouflage, decoration, or, in the

alternative, utilization for advertising, of the walls of these structures and objects. A further object of the invention is to provide a cover for structures and objects such as portable toilets, storage containers, trash receptacles, and dumpsters to eliminate the eyesore that is associated with these structures and objects.” It is respectfully submitted that Fanelli is not analogous prior art. It is not in the same field of endeavor and is not reasonably pertinent to the particular problem with which the inventor is involved. A cover for a dumpster is concerned with ventilation and visual blight (See Fanelli [009]-[010]). The present invention is concerned with charging a device without needing to open a bag or remove a power source. These are totally unrelated problems.

“A reference qualifies as prior art for an obviousness determination under § 103 only when it is analogous to the claimed invention.” In re Klein, 647 F.3d 1343, 1348 (Fed. Cir. 2011). That is, the prior-art analysis, for obviousness purposes, does not combine disparate elements from every conceivable field of human endeavor, and the Federal Circuit has explained that art that is “too remote to be treated as prior art” should not be considered. See In re Clay, 966 F.2d 656, 658-59 (Fed. Cir. 1992) (emphasis added). “Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed; and (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.” In re Klein, 647 F.3d at 1348 (emphasis added); In re Clay, 966 F.2d at 658-59.

The “field of endeavor” is determined “by consulting the structure and function of the claimed invention as perceived by one of ordinary skill in the art.” In re Bigio, 381 F.3d 1320, 1326 (Fed. Cir. 2004). This Court has explained that a prior art reference cannot be considered to be within the invention’s field of endeavor merely because both relate to the same industry. See Clay, 966 F.2d at 659-60 (holding that even though both the patented invention and prior art reference related to the petroleum industry and both taught using a gel, they were not directed to the same field of endeavor because the two inventions were used in different environments). “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.” Id. at 659. “If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection.” Id.

However, “[i]f [a reference] is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it.” *Id.* “The pertinence of the reference as a source of solution to the inventor’s problem must be recognizable with the foresight of a person of ordinary skill, not with the hindsight of the inventor’s successful achievement.” *Sci. Plastic Prods., Inc. v. Biotage AB*, 766 F.3d 1355, 1359 (Fed. Cir. 2014).

The Federal Circuit has, on numerous occasions, reversed the PTAB’s finding of obviousness where the PTAB improperly considered non-analogous prior art. For example, in *In re Clay*, the Court reversed the PTAB’s decision where the patented invention and the prior art reference were not directed to the same field of endeavor nor was the prior art—which was directed at solving a petroleum extraction problem—reasonably pertinent to the invention—which was attempting to solve a petroleum storage problem. 966 F.2d at 559-60. *In re Klein* involved “a mixing device for use in preparation of sugar-water nectar for bird and butterfly feeders” which addressed the problem of “making a nectar feeder with a movable divider to prepare different ratios of sugar and water for different animals.” 647 F.3d at 1347. This Court held that the prior art references, which addressed problems of separating solid objects and facilitating the mixing of two separated substances together, were not reasonably pertinent to the particular problem of the claimed invention, and reversed the PTAB’s finding of obviousness. *Id.* at 1347- 52. Likewise, in *In re Oetiker*, this Court reversed the PTAB, holding that a POSITA seeking to solve a problem of fastening a hose clamp would not reasonably be expected to look to fasteners for women’s garments. 977 F.2d 1443, 1446-47 (Fed. Cir. 1992). Additionally, in *In re Natural Alternatives, LLC*, this Court reversed the PTAB, holding that there was not substantial evidence that a POSITA would have been motivated to combine an unrelated prior art reference, in the form of a patent for desugared sugar beet molasses (“DSBM”) used as tire ballast, to teach the use of DSBM in deicing road surfaces. 659 F. App’x 608, 613-14 (Fed. Cir. 2016). In *Smith & Nephew, Inc. v. Hologic, Inc.*, this Court reversed the PTAB’s finding of obviousness where the prior art, despite ending up with a “similar mechanical solution” to the invention, was not reasonably pertinent to the problem that the inventor was trying to solve. 721 F. App’x 943, 949 (Fed. Cir. 2018).

Here, the present invention and the Fanelli reference are not from the same field of endeavor. Because Fanelli has a wholly different purpose from the claimed invention and relates to a very different problem, it would not “logically . . . have commended itself to an inventor’s

attention in considering his problem.” See Clay, 966 F.2d at 659. Accordingly, Fanelli is not reasonably pertinent and should not be considered.

Claim 28

Applicant respectfully traverses this attempted use of Official Notice with respect to claim 28 as improper. Consequently, a necessary element of a *prima facie* case is absent.

Firstly, it is to be appreciated that the Office Action attempts to officially notice legal conclusions, –namely “the cable is known and it would have been obvious to a person having ordinary skill in the art to have modified Ferber such that one of the connectors is of the USB-C type for the benefit of using an industry standard type of charging connection” Official Notice, however, is only proper for facts. (*MPEP* § 2144.03). Indeed, Official Notice is only permissible for those few facts that are of a “notorious character” and that are “capable of instant and unquestionable demonstration”. (*MPEP* § 2144.03(A)). It is improper to use Official Notice for conclusions of law.

Secondly, the Office Action relies on Official Notice as the “principal evidence” upon which the rejection of claim 28 is based. Official Notice cannot be used in this manner. As Section 2144.03(A) of the *MPEP* expressly warns, it is never appropriate to rely solely on Official Notice as the principal evidence upon which a rejection was based. Instead, Official Notice is only appropriate for facts and that serve to “fill in the gaps” in a rejection. (*MPEP* § 2144.03(A)). This is why official notice is to be judicially applied. (*MPEP* § 2144.03). It is unreasonable to conclude that the Office has used Official Notice to “fill in” a gap in this rejection.

Thirdly, the Office attempts to take Official Notice of matter that is not “capable of instant and unquestionable demonstration”, as expressly required by section 2144.03(A) of the *MPEP*. Indeed, even assuming *arguendo* that the USB-C cable is routine is a fact, this fact would be neither of notorious character nor instantly and unquestionably demonstrable. Moreover, courts have long rejected the notion that official notice can be taken on the state of the art. (See Memorandum to Patent Examining Corps from the Deputy Commissioner for Patent Examining Policy regarding Procedures for Relying on Facts Which are Not of Record as Common Sense or for Taking Official Notice, n.6, citing *In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973)). Thus, the Office’s attempt to officially notice the level of ordinary skill in the art is improper as a matter of law. In sum, the Office’s attempts at Official Notice are

improper and traversed. Consequently, there are evidentiary gaps in the rejection of independent claim 28 that are fatal to a *prima facie* case of obviousness.

Proper use of Official Notice requires compliance with several obligations expressly set forth in the *Manual of Patent Examining Procedure*. The Office has failed to meet these obligations. Specifically, the Office has failed to satisfy its obligations under *MPEP* § 2144.03. *MPEP* § 2144.03 (B), for example, expressly requires the Office to provide specific factual findings predicated on sound technical and scientific reasoning to support taking Official Notice. The *MPEP* goes on to explain that this means that the Office should present an Applicant with the explicit basis on which Official Notice is based so that the Applicant is able to challenge the assertion in the next reply after the Office action. (*MPEP* §2144.03(B)). Naked assertions about what is allegedly known in the art, like those made at page 9 of the Office Action, cannot satisfy these requirements. Applicant respectfully requests confirmation that the Office is not attempting to take Official Notice with respect to claim 28 (or any other claims). Applicant further notes that claim 28 is allowable for its dependence on an allowed base claim.

CONCLUSION

Applicant requests a notice of allowance.

Sincerely,

/Jennifer Meredith/

Jennifer Meredith

Reg. No. 47,790

June 9, 2022